

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,107	07/20/2001	Jefferson M. Kommers	VIGN1270	5626
25094 7	590 11/10/2003	EXAMINER		
GRAY, CARY, WARE & FREIDENRICH LLP 1221 SOUTH MOPAC EXPRESSWAY			AL HASHEMI, SANA A	
SUITE 400				PAPER NUMBER
AUSTIN, TX 78746-6875			2171	G
			DATE MAILED: 11/10/2003	3

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	- A
	09/682,107	KOMMERS ET AL.	
Office Action Summary	Examiner	Art Unit	
	Sana Al-Hashemi	2171	
- The MAILING DATE of this communication app Period for Reply	pears on the cover sheet w	ith the correspondence addr	ess
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a repl If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	36(a). In no event, however, may a y within the statutory minimum of thi will apply and will expire SIX (6) MOI, cause the application to become A	reply be timely filed  rty (30) days will be considered timely.  NTHS from the mailing date of this commod the commod that is t	munication.
1) Responsive to communication(s) filed on 16.5	September 2003 .		
2a) This action is <b>FINAL</b> . 2b) ⊠ Th	is action is non-final.		
3) Since this application is in condition for allows closed in accordance with the practice under Disposition of Claims			merits is
4) Claim(s) 1-24 is/are pending in the application			
4a) Of the above claim(s) is/are withdraw			
5) Claim(s) is/are allowed.	Will Holli dollada di di		
6)⊠ Claim(s) <u>1-24</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/o	r election requirement.		
Application Papers	,		
9) The specification is objected to by the Examine	r.		
10) ☐ The drawing(s) filed on is/are: a) ☐ acce	oted or b) objected to by	the Examiner.	
Applicant may not request that any objection to the	e drawing(s) be held in abey	ance. See 37 CFR 1.85(a).	
11) The proposed drawing correction filed on	_ is: a)☐ approved b)☐ o	disapproved by the Examiner.	
If approved, corrected drawings are required in re	· •		
12) The oath or declaration is objected to by the Ex	aminer.		
Priority under 35 U.S.C. §§ 119 and 120			
13) Acknowledgment is made of a claim for foreign	n priority under 35 U.S.C.	§ 119(a)-(d) or (f).	
a) ☐ All· b) ☐ Some * c) ☐ None of:			
<ol> <li>Certified copies of the priority document</li> </ol>	s have been received.		
2. Certified copies of the priority document	s have been received in A	Application No	
<ul> <li>Copies of the certified copies of the prior</li> <li>application from the International Bu</li> <li>See the attached detailed Office action for a list</li> </ul>	reau (PCT Rule 17.2(a)).		age
14) Acknowledgment is made of a claim for domesti	c priority under 35 U.S.C.	§ 119(e) (to a provisional a	pplication).
a) The translation of the foreign language pro	* *		
Attachment(s)	-		
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of	Summary (PTO-413) Paper No(s). Informal Patent Application (PTO-1	

Art Unit: 2171

## **DETAILED ACTION**

Claim Status: 1 –24 are rejected.

Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-24 rejected under 35 U.S.C. 103(a) as being unpatentable over Caid et al. (US Patent No. 5,619,709) in view of Light (US Patent No. 5,774,888).

1. Regarding Claims 1, 7, 13, and 19, Caid discloses a method of searching for a plurality of information objects comprising:

Receiving a first query, (see Fig. 2A, column 6, lines 38-45, Caid);

searching the database using the second query (see column 5, lines 26-36, Caid);

finding a first identifier for a first: information object that corresponds to the second query, wherein the first information object is part of the plurality of information objects (see column 5, lines 37-48, Caid);

Art Unit: 2171

Caid does not disclose the step of automatically expanding a scope of a search from the first query to a second query. However, Light discloses automatically expanding the scope of search (see column 4, lines 60-63, Light). It would have been obvious to the ordinary skilled artisan at the time of the invention to add/modify the Caid system by expanding the scope of search with the motivation of providing users with more options and higher number of responses which increases the possibility of receiving all the results needed.

2. Regarding Claims 2, and 14, the combination of Caid and Light discloses a method wherein:

the database comprises a plurality of information objects including the first information object and a plurality of keywords and a hierarchy of keyword, wherein the plurality of keywords include a first keyword and a second keyword (see column 5, lines 55-58, Caid);

each information object within the plurality of information objects has at least one related keyword from the plurality of keywords (see column 5, lines 37-48, Caid);

the hierarchy defines a relationship among the keywords within the plurality of keywords the first query comprises the first keyword but not the second keyword; and

the second keyword query comprises the first and second keyword (see column 5, lines 59-62, Caid).

3. Regarding Claims 3, and 15, the combination of Caid and Light discloses a method further comprising:

automatically determining a first association score between the first keyword and the second keyword based at least in part upon their positions within the hierarchy (see column 13, lines 1-8, Caid).

Page 4

Application/Control Number: 09/682,107

Art Unit: 2171

- 4. Regarding Claims 4, and 16, the combination of Caid and Light discloses a method further comprising automatically determining a second association score between the first keyword and the third keyword based upon their positions within the hierarchy, wherein expanding the first query is performed such that the second query does not include the third keyword (see Fig. 4, Caid).
- 5. Regarding Claims 5, and 17, the combination of Caid and Light discloses a method further comprising filtering at least some of the information objects within the plurality of information objects to meet a defined criterion (see column 13, lines 40-46, Caid).
- 6. Regarding Claims 6, and 18, the combination of Caid and Light discloses a method further comprising: determining an association score between each keyword within the first query and each keyword within the second query based at least in part upon their positions within the hierarchy; and calculating a first relevance score for the first information object, wherein:

at least one first relevancy rating is obtained for the first information object (see column 11, lines 11-15, Caid);

the first relevance score includes a first sum divided by a number of keywords within the second query (see column 11, lines 11-15, Caid);

the first sum includes a first summation of first products (see column 11, lines 16-20, Caid);

and for each keyword within the second query, its first product includes a corresponding first association score and a corresponding first relevance rating (see column 4, lines 40-45, Caid).

Art Unit: 2171

7. Regarding Claims 8, and 20, the combination of Caid and Light discloses a method further comprising:

searching a database using the second query, wherein an information object is associated with the second keyword but is riot associated with the first keyword (see column 6, lines 27-30, Caid);

and sending a second signal that includes an object identifier for the information object (see column 6, lines 30-37, Caid)..

8. Regarding Claims 9, 11, and 23, the combination of Caid and Light discloses a method wherein:

the first keyword, the second keyword, and a third keyword are represented by a first node, a second node, and a third node, respectively, within a keyword hierarchy (see Fig. 14, Caid);

the method further comprises determining a first association score between the first node and the second node and a second association score between the first node and the third node, wherein the first and second association scores indicate that the first node is more closely associated with the second node than the third node (see column 13, lines 1-8, Caid);

and expanding is performed such that the second query does not include the third keyword (see column 6, lines 40-46, Caid).

9. Regarding Claim 10, the combination of Caid and Light discloses a method automatically determining an association score between the first keyword and the second keyword based at least in part upon their positions within the hierarchy (see column 13, lines 1-8, Caid).

Page 6

Application/Control Number: 09/682,107

Art Unit: 2171

- 10. Regarding Claims 12, and 24, Caid discloses a method wherein automatically determining the association score includes determining a first common ancestor (see column 9, liens 55-59, Caid).
- 11. Regarding Claim 21, the combination of Caid and Light disclose a data processing system readable medium wherein:

the first keyword, the second keyword, and a third keyword are represented by a first node, a second node, and a third node, respectively, within a keyword hierarchy (see Fig. 2A, Caid);

the method further comprises determining a first association score between the first node and the second node and a second association score between the first node and the third node (see Fig. 2B, Caid);

wherein the first and second association scores indicate that the first node is more closely associated with the second node than the third node (see Fog. 2C, Caid); and

expanding is performed such that the second query does not include the third keyword (see Fig. 2F, Caid).

12. Regarding Claim 22, the combination of Caid and Light discloses a data processing system readable medium the method further comprises automatically determining an association score between the first keyword and the second keyword based at least in part upon their positions within the hierarchy (see column 13, lines 1-8, Caid).

Art Unit: 2171

## Points of Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to: Sana Al-Hashemi whose telephone number is (703) 305-4881. The examiner can normally be reached on Monday - Friday from 8:00 AM to 4:30 PM.. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic, can be reached on (703) 308-1436. Any response to this office action should be mailed to: The Commissioner of Patents and Trademarks, Washington, D.C. 20231. Or telefax at phone number (703) 872-9306. For formal or draft communications, please label "PROSPOSED" or "DRAFT". Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, 6<sup>th</sup> Floor Receptionist, Arlington, Virginia. 22202.

Sana Al-Hashemi Patent Examiner Technology Center 2100 October 21, 2003

> SAFET METJAHIC SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2100